

Facility Name: **Burt Lumber Company**
City: Washington
County: Wilkes
AIRS #: 04-13-31700004

Application #: TV-548719
Date Application Received: February 16, 2021
Permit No: 2421-317-0004-V-03-0

Program	Review Engineers	Review Managers
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Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Facility Identification**

1. Facility Name:

Burt Lumber Company

2. Parent/Holding Company Name

Burt Lumber Company

3. Previous and/or Other Name(s)

Not applicable.

4. Facility Location

911 Greensboro Road, Washington GA 30673 (Wilkes County)

5. Attainment, Non-attainment Area Location, or Contributing Area

Burt Lumber Company (hereinafter "facility") is located in an attainment area for all pollutants.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/Effectiveness	Purpose of Issuance
2421-317-0004-E-02-0	May 7, 2019	Transitional permit for the construction of a continuous drying kiln.

D. Process Description

1. SIC Codes(s)

2421 – Sawmill/Lumber mill and Planing mills - General.

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

The lumber mill produces kiln dried/planed lumber. It also produces green lumber, bark, sawdust, and planer mill shavings.

3. Overall Facility Process Description

Burt Lumber Company is a softwood lumber mill with a chipper mill, planer mill and direct-fired continuous lumber drying kiln.

In the sawmill, southern yellow pine logs are received by truck. Logs are debarked, cut into smaller logs and then into rough lumber in the sawmill before being sent to the kiln for drying. Wood residue from the sawmill is conveyed to a chipper (CPM) and then to a chipper cyclone (MCC). Collected wood waste is used as fuel in the direct-fired continuous kiln.

The lumber is dried in the direct-fired continuous drying kiln (CDK). Lumber moisture content is reduced from approximately 50 percent down to approximately 19 to 21 percent. The dried dimensional lumber is then sent to a planer mill. CDK utilizes heat from a 31.5 million Btu per hour (MMBtu/hr) wood waste-fired burner. To provide initial heat during start-up, the kiln is equipped with a 30 MMBtu/hr natural gas-fired burner. The kiln vents primarily through two powered vents/stacks at each end of the continuous kiln. Venting is controlled by computer to adjust the relative humidity and temperature during the drying process. A small portion of the kiln emissions is released from the two kiln doors at each end.

In the Planer mill, the kiln dried dimensional lumber is sized to various specifications. The planer mill shavings are collected by the planer mill cyclone which vents to the atmosphere.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

Burt Lumber Company is located in Wilkes County, which is in attainment for all criteria pollutants. The facility is not one of the 28 named PSD source categories. With the design capacity of the continuous kiln (ID No. CDK), 100 million board feet per year (MMbf/yr), the facility-wide VOC (key pollutant) potential-to-emit (PTE) is estimated as 200 tons per year (tpy). The PTE for every criteria pollutant, including VOC, is lower than 250 tpy. Therefore, the facility is minor under the PSD regulations.

Since Wilkes County is in attainment for all criteria pollutants, non-attainment area new source review (NAA NSR) is not applicable.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓			✓
PM ₁₀	✓			✓
PM _{2.5}	✓			✓
SO ₂	✓			✓
VOC	✓	✓		
NO _x	✓			✓
CO	✓			✓
Individual HAP	✓			✓
Total HAPs	✓			✓

3. MACT Standards

The facility is a minor source of hazardous air pollutant (HAP) emissions. Therefore, no Major source MACTs apply to the facility. The facility does not have any sources that are subject to any area source GACT.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	no
Program Code 8 – Part 61 NESHAP	no
Program Code 9 - NSPS	no
Program Code M – Part 63 NESHAP	no
Program Code V – Title V	yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

Not applicable.

B. Applicable Rules and Regulations

Not applicable.

C. Compliance Status

Not applicable.

D. Permit Conditions

Condition 2.1.1 limits facilitywide VOC emissions to 200 tons/year for PSD avoidance.

Condition 2.1.2 limits HAP emissions below major source thresholds for individual and total HAPs.

III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
SAW	Sawmill Group (includes debarker, saws and chippers)	391-3-1-.02(2)(n)	n/a	none
CDK	Continuous Dry Kiln Direct Fired Wood: 31.5 MMBtu/hr Natural Gas: 30 MMBtu/hr	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	n/a	none
PLM	Planer mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	PMC	Medium efficiency cyclone
CPM	Chipper mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	CCY	Medium efficiency cyclone

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

B. Equipment & Rule Applicability

Emission and Operating Caps:

The facility-wide volatile organic compounds (VOC) potential-to-emit (PTE), with the design throughput rate of Dry Kiln DK01, is below the VOC PSD major source threshold of 250 tons per year (tpy); however, the 200-tpy VOC PTE is not far below 250 tpy. The Division has seen several lumber kilns processing more than the design throughput rate, and therefore has a concern that the facility will emit more than 250 tpy VOC and may violate the PSD regulations. Therefore, the design throughput rate of DK01 is placed in the permit as an enforceable limit, in order to ensure that the facility will not violate the PSD regulations. This new annual throughput cap is included in new Condition 3.2.1.

Note that the facility conducted their toxic impact assessment (TIA) for the E-02-0 permit with the emission rates of HAPs associated with the 100-MMBf/yr throughput. Therefore, an increase in the annual throughput over 100 MMBf/yr would require an updated TIA.

The fuel specification for CDK is included in new Condition 3.2.2. The facility-wide PTE was calculated based on the fuel types included in the application. The previous TIA was also conducted based on the calculated emission rate per the fuel types. Therefore, the facility is not allowed to burn any fuel other than natural gas and wood without an approval from the Division.

The previous TIA was conducted based on the fact that CDK is equipped with power vents. Therefore, operation of the power vents whenever CDK is in operation needs to be ensured to validate the TIA. This is included in new Condition 3.2.3.

Rules and Regulations Assessment:

The sawmills are subject to Georgia Rule (n) for fugitive emission opacity.

The continuous drying kiln CDK is subject to Georgia Rule (e) for PM emissions and Georgia Rule (b) for opacity from the kiln power vents/stack at the two ends of the kiln and Georgia Rule (g)2 for fuel sulfur content for the fuel burned in the kiln burners.

The Planer mill and Chipper mill are subject to Georgia Rule (b) for opacity and to Georgia Rule (e) for PM emissions.

C. Permit Conditions

Condition 3.2.1 limits the continuous dry kiln to drying no more than 100 MMbf/year.

Condition 3.2.2 allows firing of natural gas and wood only in the dry kiln burner.

Condition 3.2.3 requires the Permittee to operate the power vents at each end of the kiln whenever the kiln operates to ensure compliance with the Georgia Air Toxics Guidelines.

Condition 3.4.1 subjects each process equipment at the facility to 40% opacity limit per Georgia Rule (b).

Condition 3.4.2 limits PM emissions from each process equipment per Georgia Rule (e)1.(i).

Condition 3.4.3 lists some measures the Permittee can adopt to minimize fugitive emissions from fugitive sources at the lumber mill.

Condition 3.4.4 limits fugitive emissions opacity to 20% per Georgia Rule (n)2.

Condition 3.5.2 requires operation of the chipper cyclone and the planer mill cyclone whenever the chipper and the planer mill operate for PM control.

IV. Testing Requirements (with Associated Record Keeping and Reporting)**A. General Testing Requirements**

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

Not applicable.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Condition 5.2.1 requires weekly checks of the chipper and the planer mill cyclones.

C. Compliance Assurance Monitoring (CAM)

An emission unit is subject to the provisions of 40 CFR 64, "Compliance Assurance Monitoring" because:

- It is located at a major source that is required to obtain a Title V Permit. [§64.2(a)]
- It is subject to an emission limitation or standard for the applicable pollutant (PM). [§64.2(a)(1)]
- The facility uses a control device to achieve compliance. [§64.2(a)(2)]
- Potential pre-controlled emissions of the applicable pollutant (particulate matter) from such emission unit are at least 100 percent of major source threshold. [§64.2(a)(3)]

A CAM Plan is required for pollutant-specific emissions units (PSEU) at a major source that is required to obtain a Title V permit and is subject to 40 CFR Part 64. The facility is a major source and is required to obtain a Title V permit, but it does not have any applicable PSEUs.

The facility does not have any pollution control devices and does not have any emission standards for any criteria pollutants other than particulate matter (PM). The following discussion only addresses PM emissions.

The planer mill (ID No. PLM) and chipper mill (ID No. CPM) are connected to Cyclones PMC and CCY, respectively, but the cyclones are not used to achieve compliance with any emission limitation or standard. The facility used the cyclones to mainly recover woodchips, sawdust, and shavings. Furthermore, the pre-control PM PTE from each of PLM and CPM is expected to be much below the Title V Major threshold of 100 tons per year. Therefore, a CAM Plan is not required for the facility.

VI. Record Keeping and Reporting Requirements**A. General Record Keeping and Reporting Requirements**

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

Condition 6.1.7b.i. defines an exceedance as any twelve consecutive month period for which the total amount of wood products processed by the continuous dry kiln (ID No. CDK) exceeds 100 MMbf..

Condition 6.1.7c.i. requires reporting of the failure to carry out the cyclone check inspection.

Condition 6.1.7c.ii. requires reporting of any adverse conditions identified by the weekly cyclone inspection that is not corrected within 24 hours.

Condition 6.1.7c.iii. requires reporting of any instance when the dry kiln power vents are not operated when the dry kiln operates.

Condition 6.2.1 requires recording of the monthly drying amounts by the continuous dry kiln and requires reporting of any amounts in excess of the 1/12 of the annual drying limit of 100 MMbf.

Condition 6.2.2 requires the Permittee to maintain a rolling total amount of the lumber dried in the last twelve consecutive months ending in each month and reporting of any exceedance of the 100-MMbf limit during any month in the reporting period.

VII. Specific Requirements**A. Operational Flexibility**

Not applicable.

B. Alternative Requirements

Not applicable.

C. Insignificant Activities

See Permit Application on GEOS website.
See Attachment B of the permit

D. Temporary Sources

Not applicable.

E. Short-Term Activities

Not applicable.

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements

Not applicable.

I. Stratospheric Ozone Protection Requirements

The standard permit condition pursuant to 40 CFR 82 Subpart F has been included in the Title V permit. The facility has indicated in the application that they have air conditioners or refrigeration equipment that use CFC's, HFC's, or other stratospheric ozone-depleting substances.

J. Pollution Prevention

Not applicable.

K. Specific Conditions

Not applicable.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//